

NEXT-GENERATION REMOTE INITIATION SYSTEM

RISE-1 is a smart long range explosive initiation system designed for various military applications



LONG RANGE

25 km initiation range in line of sight zone. Retransmitter can be used to increase initiation range or reach non-line of sight points.



OVERCOMING DIFFICULT TERRAIN WITH SIGNAL RETRANSMISSION

The signal can be easily amplified by using an extra retransmitter or drone repeater, ensuring that the initiator is always within reach and can be activated as needed.



ENHANCED EW RESISTANCE WITH NON-STANDARD FREQUENCIES

The non-standard frequency range, passive design and signal modulation allows to effectively fight against various EW solutions and ensure reliable battlefield performance.



LONG LASTING BATTERY

High battery capacity of the initiator - up to 140 days @ 20°C in standby mode, resistance to heat, cold and humidity enables the equipment to be used for long term operations such as zone control missions.

Safety Features

- Protection against static charge accumulation
- Initiator lock function
- Safe time delay
- · Additional confirmation required before detonation

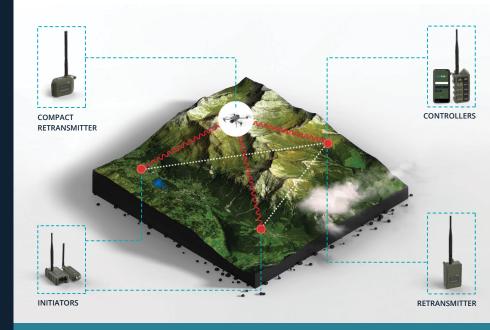
Security Features

- Encrypted communication to prevent inadvertent initiation
- · Chirp based communication, high bandwidth and low chirp spread factor
- Increased resistance to interference and radio signal jamming
- Protection against hacking and firmware extraction from microcontrollers
- Password protected access
- Code protected initiator pairing



long-distance secure network

long-distance secure network



In standby mode, transmiters, retransmitters and initiators are passive and do not emit any signal. Small data packet with minimal footprint are sent only when the system is being tested/goes into arm mode.







| RISE-1 System | Specifications | |
|-------------------------------|---|--|
| Effective line of sight range | 25 km (can be increased with repeater) | |
| Security | Chirp based communication, high bandwidth, low chirp spread factor | |
| Communication | AES-256 (Military-Grade Encryption) | |
| Operating temperature | From -20°C (NATO STANAG 4370 C0) to +49°C (NATO STANAG 4370 C1) | |
| Storage temperature | From -32°C to +49°C (NATO STANAG 4370 C1) | |
| Color of the housing | Olive Green (RAL6003) | |
| NATO Stock Number (NSN) | 1375-47-001-1447 | |
| Water/dust resistance | IP67 (LST EN 60529) | |
| 3 safety levels detonation | Detonation is not allowed for 60 seconds after the Initiator is turned on Arm mode must be on before initiating detonation Confirmation is requested before detonation | |
| Functions | Lock – defuses and locks capacitor when changing batteries, changing initiator location, defusing detonator or friendly troops movement nearby Multiple controllers can connect to a single initiator Group detonation – single initiation can detonate a group of initiators | |

Controller Application

(RISE-1 APP) Specifications

| (NISE-TAFF) | Specifications |
|-------------------------------|---|
| Controller operating system | Android OS |
| Number of paired Initiators | Up to 50 pcs |
| Number of paired Transmitters | 1 pc |
| Number of paired Repeaters | Up to 10 pcs |
| Functions | Group detonation, setting delay timer for initiation, Initiator name editing, Initiator Lock mode |
| Status data is provided | Received signal strength, signal noise ratio, battery status, detonation chain status |
| NATO Stock Number (NSN) | 7030-47-001-1448 |



Initiator

| (RISE-1 RX) | Specifications |
|----------------------------------|-----------------------|
| Initiation power / voltage | 1.68 Joule / 15 Volts |
| Dimensions | 136x40x67mm |
| Weight | 265g |
| Battery run time in standby mode | Up to 140 days @ 20°C |
| Battery run time in armed mode | Up to 40 days @ 20°C |
| NATO Stock Number (NSN) | 1375-47-001-1449 |



Compact Initiator

| (RISE-1 cRX) | Specifications |
|----------------------------------|------------------------|
| Initiation power / voltage | 0.5 Joule / 15 Volts |
| Dimensions | 107x38x44mm |
| Weight | 124g |
| Battery run time in standby mode | Up to 200 hours @ 20°C |
| Battery run time in armed mode | Up to 100 hours @ 20°C |



*cRX can optionally be equipped with an integrated impact sensor for impact initiation operations.

Retransmitter

| (RISE-1 RTX) | Specifications |
|-------------------------|----------------------|
| Dimensions | 112x31x67mm |
| Weight | 215g |
| Battery run time | Up to 40 days @ 20°C |
| NATO Stock Number (NSN) | 5820-47-001-1450 |



Compact Retransmitter

| (RISE-1 cRTX) | Specifications |
|--|---------------------|
| Dimensions | 67x76x28mm |
| Weight | 92g |
| Battery run time in Repeater mode | Up to 7 days @ 20°C |
| Battery run time in Restransmitter mode | Up to 5 days @ 20°C |



Blaster

| (RISE-1 BTX) | Specifications |
|-----------------------------|-----------------------------|
| Dimensions | 140x32x67mm |
| Weight | 246g |
| Number of paired Initiators | 4 |
| Functions | Testing, arming, detonation |
| Battery run time | Up to 70 days @ 20°C |
| NATO Stock Number (NSN) | 5820-47-001-2090 |



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